About This Guide

The Cisco 6130 NI-2 digital subscriber line access multiplexer (DSLAM) with NI-2 (network interface, Version 2) is a member of the Cisco 6000 family with NI-2.

This preface explains objectives, audience, and organization of the *Cisco 6130 DSLAM with NI-2 User Guide* and defines typographical conventions.

Document Objective

This book provides general information about Cisco 6130 NI-2 DSLAM systems with NI-2 network interface modules. This guide contains descriptions of Cisco 6130 NI-2 DSLAM system components, system requirements, system specifications, and configuration specifications for several Cisco 6130 NI-2 DSLAM installations.

The Cisco 6130 NI-2 designation is a product reference for a Cisco 6100 series DSLAM with NI-2 network interface module that runs Cisco IOS software.

To install, configure, and operate a Cisco 6130 NI-2 DSLAM, refer to its appropriate companion publications. For information about companion publications, see the "Companion Publications" section on page ix in this preface.

Audience

This book is intended for use by central office (CO) facility technicians and maintenance personnel who are responsible for installing, configuring, and maintaining a Cisco 6130 NI-2 DSLAM system. You should be familiar with telco products and networking systems.

About This Guide 78-10280-01 02/15/00

Document Organization

The Cisco 6130 DSLAM with NI-2 User Guide is organized as follows:

• Chapter 1, Cisco 6130 NI-2 DSLAM Systems Introduction—Describes Cisco 6130 NI-2 system components, illustrates various configurations, and describes IOS software.

- Chapter 2, Cisco 6130 NI-2 DSLAM System Configurations—Describes several Cisco 6130 NI-2 Series DSLAM configurations in the Cisco 6000 DSL product family.
- Chapter 3, Cisco 6130 NI-2 DSLAM System Cables—Describes NEBS compliance cabling guidelines, provides cabling configuration diagrams, and provides part numbers for Cisco 6130 NI-2 DSLAM hardware configurations.
- Chapter 4, Cisco 6130 NI-2 DSLAM System Connectors—Describes backplane connectors of each Cisco 6130 system component.
- Chapter 5, Cisco NI-2 DSLAM System Modules—Describes Cisco NI-2 DSLAM system modules and cards and their respective status indicators.
- Appendix A, Planning for a Cisco 6130 NI-2 DSLAM System—Provides tables necessary to plan total rack space and power requirements for your Cisco 6100 NI-2 series system configuration.
- Appendix B, Port Mapping—Provides modem port mapping tables showing tip, ring, slot, and line mapping for the Cisco 6100 NI-2 system and modem port connections.
- Appendix C, Cisco 6130 NI-2 DSLAM System ATM Addressing Guidelines—Provides network provider guidelines for setting up Cisco 6100 NI-2 system ATM virtual path connection and virtual circuit connection addresses.
- Appendix D, Related Documentation—Lists companion publications.
- Appendix E, ADSL Technology Glossary—Lists asymmetric digital subscriber line (ADSL) related terms and acronyms.
- Index

Document Conventions

This publication uses the conventions listed in Table 1, Table 2, and Table 3.

Table 1 Font Conventions

Convention	Definition	Sample
Times bold	Text font used for any argument, command, keyword, or punctuation that is part of a command that the user enters in text and command environments.	Enter the UNIX route command.
Times italic	Text font used for publication names and for emphasis.	Refer to the <i>Cisco 6130 with NI-2 User Guide</i> for examples.
Courier	Font used for screen displays, prompts, and scripts.	Are you ready to continue? [Y]
Courier bold	Font used to indicate text the user enters in examples of command environments.	Login: root Password: <password></password>

78-10280-01 02/15/00 About This Guide

Table 2 Command Syntax Conventions

Convention	Definition	Sample
Vertical bar ()	Separates alternative, mutually exclusive elements.	offset-list {in out} offset
Square brackets ([])	Indicate optional elements.	[no] offset-list {in out} offset
Braces ({ })	Indicate a required choice.	offset-list {in out} offset
Braces within square brackets ([{ }])	Indicate a required choice within an optional element.	[{letter\number} Enter]
Boldface	Indicates commands and keywords that are entered literally as shown.	[no] offset-list {in out} offset
Italics	Indicate arguments for which you supply values.	offset-list {in out} offset
	Note In contexts that do not allow italics, arguments are enclosed in angle brackets (<>).	

Table 3 Note, Caution, and Warning Conventions

Convention	Description	
Note	Means (<i>reader</i>) <i>take note</i> . Notes contain helpful suggestions or references to material not covered in the guide.	
Caution	Means (reader) be careful. In this situation, you might do something that could result in equipment damage or loss of data.	
Warning	Means <i>danger</i> . You are in a situation that could cause bodily injury. Before yo work on any equipment, you must be aware of the hazards involved with electricircuitry and familiar with standard practices for preventing accidents. To see translated versions of the warning, refer to the Regulatory Compliance and Saf document that accompanied the device.	

Companion Publications

The following are companion publications to the Cisco 6130 DSLAM with NI-2 User Guide:

- Cisco 6130 DSLAM with NI-2 Installation Guide describes how to set up and install a Cisco 6130 NI-2 DSLAM system with plain old telephone service (POTS) and without POTS.
- Cisco DSLAM NI-2 Module Installation and Configuration describes the three system processor hardware configurations available with NI-2 (processor) modules in a Cisco 6130 NI-2 DSLAM. These include DS3 and OC-3 single-mode and OC-3 multi-mode configurations.
- Cisco 6130 DSLAM with NI-2 I/O Card Installation and Configuration describes how the system I/O card hardware is used to configure central office (CO) external alarms, and how to configure Cisco 6130 DSLAMs for DS3 subtending.
- Cisco DSLAM with NI-2 ATUC-1-4DMT Module Installation and Configuration describes the 4-port Discrete Multi-Tone (4DMT) line card for Cisco 6130 NI-2 DSLAMs.
- Release Notes for Cisco IOS Release 12.0(5)DA for Cisco DSLAMs with NI-2 describes hardware and software changes not included in publications listed here.

About This Guide 78-10280-01 02/15/00

Regulatory Compliance and Safety Information for the Cisco 6100 Series System

Cisco IOS is the software that operates Cisco 6000 family NI-2 systems. Use the following Cisco IOS publications:

- Configuration Guide for Cisco 6000 Family DSLAMs with NI-2
- Command Reference for Cisco 6000 Family DSLAMs with NI-2
- ATM Switch Router Software Configuration Guide
- ATM Switch Router Command Reference
- Guide to ATM Technology

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or through an annual subscription. You can also access Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

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Cisco Connection Online (CCO) is the Cisco Systems primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco customers and business partners. CCO services include product information, product documentation, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously: a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and it is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: http://www.cisco.com
- WWW: http://www-europe.cisco.com
- WWW: http://www-china.cisco.com
- Telnet: cco.cisco.com

78-10280-01 02/15/00 About This Guide

• Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact the Cisco Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

About This Guide 78-10280-01 02/15/00